

REMARKS

Claims 1-10 and 15-22 are pending. Claims 11-14 have been previously cancelled. In the Office Action mailed March 30, 2009, the Examiner issued a restriction requirement between the claims groups 1-6 and 7-10 asserting that the claims were no so linked so as to form a single general inventive concept. Applicant hereby affirms the previous provisional elections of claims 1-6 but for the reasons set forth below, respectfully requests rejoinder of claims 7-10.

The Examiner rejected claims 1-6 under 35 U.S.C. §102(b) as being anticipated by WO 00/61344, corresponding to Jordan et al. U.S. Patent 6,808,384. Applicant respectfully disagrees that that which is called for in claim 1 is disclosed or ever suggested by Jordan et al.

Claim 1 calls for, in part, an internal vibrator device that includes an operating state change device that allows the internal vibrator device to be operated in a liberation operating state in which a rotational characteristic of the electric motor differs from a rotational characteristic in the normal operating state. Claim 1 further defines that the operating state change device allows the direction of rotation of the electric motor to be reversed automatically at periodic time intervals. Applicant does not disagree that Jordan et al. discloses a vibrator that is operable in alternate rotational directions however; that is not what is called for in the pending claims.

Jordan et al., which is also assigned to Wacker Construction Equipment, discloses a vibrator that is operable in a first direction to generate a first degree of vibration and a second direction to generate a second degree of vibration. As shown in Figs. 2a and 2b of Jordan et al.,

the vibrator assembly disclosed therein includes a two part exciter assembly. As shown in Fig. 2a, when operated in a first rotational direction A, exciter portion 9 counteracts a portion of the force generated by the rotation of exciter portion 10. As shown in Fig. 2b, when rotated in the opposite rotational direction B, exciter portions 9 and 10 are located on a common side of axis 13 and collectively contribute to the oscillation of the vibrator assembly.

The vibrator assembly of Jordan et al. has two operating modes. As described in Jordan et al., those skilled in the art will appreciate that the degree of vibration of the vibrator is directly related to the degree of compaction of a fluid material, such as uncured concrete. Those skilled in the art will further appreciate that automatically reversing the exciter of the vibrator assembly of Jordan et al. would have serious undesired efforts for the operator and the material being cured. That is, if the direction of operation of the vibrator of Jordan et al. were suddenly reversed without the operator's knowledge, i.e. automatically, the vibrator would provided an undesired degree of compaction of the fluid concrete material. Such unexpected operation would yield incidence of material over-compaction, incidences of vibrator excessive vibration; and/or damage to the associated concrete form works. Jordan et al. is generally silent with respect the switched nature of the operation of the exciter assembly other than at column 4, lines 44-56 wherein the frequency switch arrangement is described which allows operation of the disclosed exciter in opposite directions.

Unlike Jordan et al., the present invention is directed to resolving jamming of the exciter of the vibrator assembly by *periodically* and *automatically* reversing the operation of the motor.

Claim 1 explicitly recites that the periodic and automatic reversal is performed by an operating state change device. There is no disclosure or suggestion in Jordan et al. that the vibrator assembly disclosed therein include any structure that facilitates automatic reversal of the exciter operation at periodic time intervals as called for in claim 1.

The Examiner has not given weight to the functional language in claim 1, relying on *Ex part Masham*. The Examiner's reliance thereon is misplaced. Unlike in *Masham*, the claims do much more than merely recite the intended use of the device. They recite a variety of structures and the interaction of those structures. Those interactions necessarily are functional because some of the claimed structures take the form of electronic controls. It is entirely permissible to define an invention by way of what it does rather than what it is. See, e.g., *In re Schreiber*, 28 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997). The Examiner may reject claims drafted in functional terms only if the cited reference discloses structure that is inherently capable of performing the claimed function. *Id.* Were that not the case apparatus claims could never be allowed for computer software-based inventions because the hardware, in the form of a programmed computer, is almost always *per se* known.

The issue is moot in the present case because, contrary to the Examiner's assertion, physical structure in the form of "an operating state change **device**" is positively recited in claim 1. The Examiner has failed to identify any disclosure of such a **device** in Jordan, and the rejection must be withdrawn for this reason alone.

Applicant has also herein amended claims 7, 8, and 10. Claim 7 has been amended to further recite the automatic and periodic nature of the liberation operating state in accordance with the remarks offered above with respect to claim 1. Claims 8 and 10 have been amended to correct typographical errors therein. As amended herein, Applicant believes claims 1 and 7 are directed to the same inventive concept and therefore requests that claims 7-10 be rejoined with the present application. Further, Applicant believes claims 7-10 are patentable over the art of record for the same reasons as set forth above.

Therefore, Applicant believes claims 1-10 are in condition for allowance.

New claims 15 and 16 depend from claim 1 and recite additional structures not disclosed in Jordan, including an automatic operation switch that switches the operating state change device off and on a period duration selection switch that determines the duration of the periodic time intervals.

New independent claim 17 is generally commensurate in scope with dependent claim 16 and is written in better conformance with preferred U.S. practice.

New independent claim 20 recites several limitations, including an "operating state change means" in means-plus-function form. The Examiner is required by statute to give the claimed functions weight. See MPEP § 2181.

CONCLUSION

It is believed that each of the Examiner's rejections has been addressed and overcome, and allowance of each of pending claims 1-10 and 14-22 is respectfully requested.

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Page -11-

No fees are believed to be payable with the submission of this response. Nevertheless, should the Examiner consider any fees to be payable in conjunction with this or any future communication, the Director is authorized to direct payment of such fees, or credit any overpayment, to Deposit Account No. 50-1170.

The Examiner is invited to contact the undersigned by telephone if such would help expedite prosecution of this application.

Respectfully submitted,



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